Observations of Comet b 1897 (*Perrine*) *made at the Royal Observatory, Greenwich.*

(*Communicated by the Astronomer Royal.*)

The observations were made with the Sheepshanks Equatorial, aperture 6·7 inches, by taking transits over two cross-wires at right angles to each other, and each inclined 45° to the parallel of declination. Magnifying power, 55.

Greenwich Mean Solar Time.				Observer.	∥−∗R.A.	Corr. for Refraction.	Log. Factor of Parallax.	∥−∗N.P.D.	Corr. for Refraction.	Log. Factor of Parallax.	No. of Comps.	Apparent R.A.	Apparent N.P.D.	Comp. Star.
1897.	d	h	m	s		m s	s	′ ″	″			h m s	° ′ ″	
Oct.	21	10	42	19	C. D.	−4 11·35	+0·04	9·8596*n*	−6 18·7	+0·2	0·4014	4	2 57 32·84	16 5 7·3	*a*
	21	10	44	46	,,	−3 25·57	−0·04	9·8522*n*	+5 19·6	−0·1	0·4063	3	2 57 30·88	16 4 55·5	*b*
	24	8	0	2	W.	+0 57·49	+0·01	0·1755*n*	−0 36·0	0·0	0·1033	6	2 11 36·45	12 12 17·9	*c*
	24	8	0	2	,,	+0 48·00	+0·09	0·1755*n*	−4 29·9	+0·1	0·1033	6	2 11 34·17	12 12 18·6	*d*
	25	7	6	30	C. D.	+0 31·90	+0·08	0·2381*n*	−3 36 6	+0·1	9·9157	9	1 49 27·96	11 5 24·6	*e*
	26	8	59	23	A. C.	+1 18·96	+0·03	0·0191*n*	−1 49 6	+0·1	0·5478	3	1 19 32·20	10 0 39·2	*f*
	30	6	40	38	C. D.	+0 6·19	−0·06	9·9871*n*	+3 37·1	−0·2	0·6064	6	22 48 24·51	8 19 10·7	*g*

Notes.

The observations are corrected for refraction, but not for parallax. They are also corrected for the error of inclination of the wires and for the motion of the comet.

Oct. 21.—The Comet was bright.

Oct. 24.—The Comet was fairly bright, with faint nucleus and a short tail.

Oct. 26.—The night was hazy and the Comet faint and ill-defined.

Oct. 30.—The Comet appeared much fainter.

The initials A. C., C. D., and W. are those of Mr. Crommelin, Mr. Davidson, and Mr. Witchell respectively.

Comparison Stars.

	Star's Name	Assumed R.A. 1897·0. h m s	Assumed N.P.D. 1897·0. ° ′ ″	Authority.
a	Groombridge 604	3 1 33·74	16 11 42·0	Greenwich Ten-Year Catalogue, 1890 (Manuscript).
b	Bradley 417	3 0 46·01	15 59 52·3	,, ,, ,, ,,
c	Groombridge 469	2 10 27·32	12 13 16·8	,, ,, ,, ,,
d	Oeltz. Arg. (N) 2523	2 10 34·50	12 17 11·3	Oeltzen-Argelander (North).
e	BD + 78° No. 63	1 48 44·25	11 9 26·6	Bonn Observations, vol. vi.
f	Anonymous	1 18 1·85	10 2 57·4	Greenwich Observations, 1897.
g	Carrington 3503	22 48 15·50	8 16 10·3	Carrington's Red Hill Catalogue.

Royal Observatory, Greenwich:
1897 *November* 12.

Approximate Ephemeris of the Leonids, from 1897 *December* 24 *to* 1898 *April* 8.

(*Communicated by G. Johnstone Stoney, D.Sc., F.R.S.*)

The following ephemeris of the part of the swarm of the *Leonids* which passed close to the Earth in 1866 is a continuation of the ephemeris in the *Monthly Notices* for 1896 December, and is intended to prepare for another attempt to photograph the meteors in the open sky. There was no perceptible impression on the photographic plate in the trial made by Dr. Isaac Roberts last spring; but it has been thought desirable to repeat the observation, since the conditions will be somewhat more favourable in the coming season, owing to the increasing intensity of sunshine upon the meteors, which will make the brightness of the image of the stream upon the photographic plate about three times what it was last season.

It was from the first recognised that it falls short of being probable that even a great depth of bodies so small and so scattered will sufficiently impress the most delicate photographic plates we possess. But inasmuch as what is aimed at is not actually impossible, and as the gain to astronomy will be great if it is attained, it has been thought desirable to make preparation for another attack.

The ephemeris has been drawn up under the kind direction of Dr. Downing, Superintendent of the Nautical Almanac, and the computations have been made by Mr. Thomas Wright, of the National Almanac Office. The cost has been defrayed out of a grant made by the Royal Society.

Greenwich, midnight.	Right Ascension.	Decl.	Log. of Dist. from Earth.	Greenwich. midnight.	Right Ascension.	Decl.	Log. of Dist. from Earth.
1897.	h m s	° ′		1898.	h m s	° ′	
Dec. 24	14 10 54	S. 5 29	0·8995	Jan. 7	14 12 59	S. 5 21	0·8817
25	14 11 6	5 29	0·8983	8	14 13 5	5 20	0·8803
26	14 11 17	5 28	0·8970	9	14 13 10	5 19	0·8790
27	14 11 28	5 28	0·8958	10	14 13 15	5 18	0·8776
28	14 11 38	5 27	0·8946	11	14 13 19	5 17	0·8762
29	14 11 48	5 27	0·8933	12	14 13 23	5 15	0·8749
30	14 11 58	5 27	0·8921	13	14 13 26	5 14	0·8735
31	14 12 7	5 26	0·8908	14	14 13 29	5 13	0·8721
1898.				15	14 13 31	5 12	0·8707
Jan. 1	14 12 16	5 25	0·8895	16	14 13 33	5 10	0·8693
2	14 12 25	5 25	0·8882	17	14 13 34	5 9	0·8679
3	14 12 33	5 24	0·8869	18	14 13 35	5 7	0·8664
4	14 12 40	5 23	0·8856	19	14 13 35	5 5	0·8650
5	14 12 47	5 23	0·8843	20	14 13 34	5 4	0·8635
6	14 12 53	5 22	0·8830	21	14 13 33	5 2	0·8621